March 4, 1983

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DIVISION OF OIL & GAS BAKERSFIELD

C. D. Fiddler
Division Manager
Northern California Division
Production Department

KERN RIVER INJECTION
WELL NO. 2-D, CHANAC ZONE

Mr. A. G. Hluza Division of Oil and Gas 4800 Stockdale Hwy., Suite 417 Bakersfield, CA 93309

Attention: Mr. David Mitchell

Gentlemen:

Chevron U.S.A. Inc. is submitting the attached information in response to your correspondence of January 29, 1983. You requested we supply (1) a statement of hardship resulting from stopping injection into the subject well, and (2) water analyses of the current injection waters.

Eliminating injection at this well could under certain circumstances directly reduce our Kern River oil production by 1,000 barrels per day. It could also reduce or affect the Kern River production activities of Kaplan Oil Company, Star Oil Company, and Santa Fe Energy Company, and our total production. Chevron, West Coast, and Witco Refineries are also somewhat dependent on this well.

All of the above listed companies deliver waste water to the Chevron U.S.A. water plant for treatment and disposal. Normally, our water plant discharges cleaned produced water to the Beardsley Canal. Well No. 2-D is the only backup disposal for this canal discharge. This backup system is necessary at times when there is a plant upset or when a number of steam generators are down. The water plant is also used to treat steam generator feedwaters.

When plant upsets occur, this well is used to supplement water discharges. During these episodes, this well and on-site sumps allow the production and refining activities to proceed usually for a long enough period to restore the plant without adversely affecting any of the users. Without this well, shutdowns would be required of any or all users. These shutdowns would require that oil production be stopped.

As you know, any shutdown of producing wells results in a number of wells sanding up. These in turn require expensive and time-consuming workovers before production can be restored. The cost of such an event is difficult to determine.

A cost more easily determined is that of directly affecting production which could depend on this well. The injection rate of this well is 30,000 B/D. Assuming an average water to oil ratio of 30 to 1, elimination of the well would mean an oil production decrease of 1,000 B/D.

Also included are water analyses of water that would be injected. Analyses were made by both BC Laboratories (Attachment I) and our company laboratory (Attachment II). A water plant flow schematic is included with each set of analyses. Sample points A, B, and C are identified. Point B is the most representative as it is a combined stream of A and C.

As discussed with you, we have been unable to prove actual oil content in Chanac formation waters. Though we do believe the Chanac sand to be lower sand bodies of China Grade production sand. It is our belief that the Chanac sands most likely have some oil content and actually have continuity with China Grade production zones.

A review of DOG literature (see Attachment III) classifies the Chanac as undifferentiated. No known barrier is identified. We believe these zones to actually be the bottom of the China Grade sands.

We appreciate your effort in appealing the proposed ruling. We are continuing our search for data sources to provide support for the appeal. If there is any additional information you need in this matter, please contact Mr. D. O. Culbertson at (805) 393-1312.

Very truly yours,

C. D. FIDDLER

Attachments